

LISTING OF THE CLAIMS

1-37. (Canceled)

38. (Currently Amended) An isolated nucleic acid probe of less than 10,000 contiguous nucleotides, wherein the probe hybridizes with the entire length of a second nucleic acid comprising:

nucleotides 1-115 of SEQ ID NO:8; and

wherein the hybridization conditions comprise:

- i. overnight incubation at 42°C of a nucleic acid blot with the probe;
- ii. washing of the blot at room temperature with 0.5x SSC and 1% Na₄P₂O₇;
- iii. washing of the blot at 65°C with 0.2x SSC, 1% SDS, and 1% Na₄P₂O₇; and
- iv. washing of the blot with 0.2x SSC at room temperature, and wherein said probe

hybridizes to a polynucleotide encoding a β3Gal-T5 and not to polynucleotides encoding β3Gal-T1, β3Gal-T2, β3Gal-T3, or β3Gal-T4 family members.

39-40. (Canceled)

41. (Previously presented) A complement of the isolated nucleic acid probe of claim 38.

42. (Currently Amended) An isolated nucleic acid probe of less than 10,000 contiguous nucleotides, wherein the probe hybridizes with the entire length of a second nucleic acid comprising 428-1011 of SEQ ID NO:8; and the hybridization conditions comprise:

- i. overnight incubation at 42°C of a nucleic acid blot with the probe;
- ii. washing of the blot at room temperature with 2x SSC and 1% Na₄P₂O₇;
- iii. washing of the blot at 65°C with 0.2x SSC, 1% SDS, and 1% Na₄P₂O₇; and
- iv. washing of the blot with 0.2x SSC at room temperature, and wherein said probe

hybridizes to a polynucleotide encoding a β3Gal-T5 and not to polynucleotides encoding β3Gal-T1, β3Gal-T2, β3Gal-T3, or β3Gal-T4 family members.

43. (Previously Presented) A complement of the isolated nucleic acid probe of claim 42.